

**Name of Company**

**ENERGY CONTROL PROGRAM  
FOR  
MECHANICAL LOCK OUT / TAG OUT / BLOCK OUT  
AND  
ELECTRICAL WORK PRACTICES**

**PURPOSE**

The purpose of this instruction is to ensure that before any employee performs any servicing or maintenance on machinery or equipment, where the unexpected energizing, start up or release of stored energy could occur and cause injury, the machinery or equipment will be rendered safe to work on.

**GENERAL INFORMATION**

OSHA has promulgated two standards that require lockout / blockout / tagout of machinery and equipment applicable to non-electrical energy producing machinery and equipment. They are:

Control of Hazardous Energy (Mechanical lockout/blockout/ tagout) - 29 CFR 1910.147, and

Electrical Safe Work practice Standard - 29 CFR 1910.333.

*NOTE:* The terminology used in this instruction is derived from the OSHA standards. See 29 CFR 1910.147(b) and 399.

Lockout is the preferred method of isolating machines or equipment from energy sources and shall be used whenever possible. Equipment obtained or modified after January 2, 1990, will be installed with lockout capability. If tags are used additional steps shall be taken as may be necessary to provide the equivalent safety available from the use of a lockout device.

**BASIC RULES FOR USING LOCKOUT OR TAGOUT SYSTEM PROCEDURE**

All equipment shall be locked out, blocked out (blocks, blinds, etc.) or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Anyone operating or attempting to operate any switch, valve, or other energy isolating device that is not locked, blocked or tagged out will be disciplined.

**GENERAL LOCKOUT/BLOCKOUT/TAGOUT PROCEDURES**

This procedure establishes the minimum requirements for the lockout, blockout or tagout of energy isolating devices. *NOTE:* Specific procedures for control of hazardous energy sources must be developed (in addition to these general procedures) for any equipment or machinery before any maintenance or servicing is performed on it, unless it meets the exceptions noted in 29 CFR 1910.147(c)(4)(I). Such machines and equipment shall be evaluated using Appendix D - the Energy Source Determination Checklist. After Energy Source Determination Checklist is completed, a Specific Procedure shall be written using Appendix F.

EXCERPT FROM 29 CFR 1910.147(c)(4)(I):

*Note: "Exception:" The employer need not document the required procedure for a particular machine or equipment, when all of the following elements exist: [1] The machine or equipment has no potential for stored or residual energy or reaccumulation of stored energy after shut down which could endanger employees:*

*[2] the machine or equipment has a single energy source which can be readily identified and isolated:*

*[3] the isolation and locking out of that energy source will completely deenergize and deactivate the machine or equipment:*

*[4] the machine or equipment is isolated from that energy source and locked out during servicing or maintenance:*

*[5] a single lockout device will achieve a locked-out condition:*

*[6] the lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance:*

*[7] the servicing or maintenance does not create hazards for other employees; and*

*[8] the employer, in utilizing this exception, has had no accidents involving the unexpected activation or reenergization of the machine or equipment during servicing or maintenance.*

## **RESPONSIBILITY**

Any employee who could be exposed to hazardous energy sources shall be instructed in the safety significance of the lockout, blockout or tagout procedure. Employees authorized to perform energy control measures shall receive training commensurate with their responsibilities and as required by the applicable OSHA standards. Appendix A is a list of names and job titles of employees authorized to lockout and tagout. Each new or transferred affected employee and other employees whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout or tagout procedure. The job titles of the affected employees is contained in Appendix B. Prior to lockout/blockout/tagout the senior authorized individual will brief all affected employees in person. In the event of tagout system only, the authorized individual will also brief all other personnel potentially exposed to the hazard in person. The procedures noted in the **SEQUENCE OF LOCKOUT OR TAGOUT SYSTEM PROCEDURE** will be followed.

## **PREPARATION FOR LOCKOUT OR TAGOUT**

The "authorized" employee shall make a survey to locate and identify all isolating devices to be certain which switch(s), valve(s) or other energy isolating devices apply to the equipment to be locked or tagged out. More than one hazardous energy source and/or means of disconnect (electrical, mechanical, or others) may be involved. If more than one energy source or stored energy consult the Appendices E and F for specific procedures and then follow the specified procedure. In the case that a machine or piece of equipment does not have a specific procedure, no work can proceed until (name or title of authorized management official) writes and provides the authorized person with a specific procedure.

## **SEQUENCE OF LOCKOUT, BLOCKOUT OR TAGOUT SYSTEM PROCEDURE**

(1) Notify all affected employees that a lockout or tagout system is going to be utilized and the reason why. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof.

(2) If the machine or equipment is operating, shut it down by the normal stopping procedure. This is usually done by depressing stop button, open toggle switch, etc. In addition, ensure that all stored energy is dissipated or properly restrained.

(3) Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy such as the springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc. must be dissipated or restrained. Combinations of these energy sources and any stored energy will require a specific procedure, in this case consult the Appendices E and F for the applicable Specific Procedure.

(4) Lockout, blockout and/or tagout device application:

- (a) Locks, blocks and tags shall be affixed to each energy isolating device only by an "authorized" employee.
- (b) Locks and tags shall be singularly identified.
- (c) Locks shall be affixed in a manner that will hold the energy isolating device in a safe or off position.
- (d) Tags, when used, shall be affixed in a manner that will clearly indicate that the operation or movement of the energy isolating device from the "safe" or "off" position is prohibited.
- (e) Tags that cannot be affixed directly to the energy isolating device shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.
- (f) All potentially hazardous stored or residual energy shall be relieved, disconnected, restrained or otherwise rendered safe. If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall continue until the possibility of accumulation no longer exists. Stored energy may require blocks, blinds, flanges, etc. in order to appropriately control stored energy.
- (g) After ensuring that no personnel are exposed, as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. (See Appendices E and F for procedures for specific machinery and equipment.)

**CAUTION: RETURN OPERATING CONTROL(S) TO "NEUTRAL" OR "OFF" POSITION AFTER THE TEST.**

(5) The equipment is now locked out or tagged out.

**TESTING OR POSITIONING OF MACHINES, EQUIPMENT, OR COMPONENTS THEREOF**

In situations which lockout, blockout or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine, equipment or component thereof, the following sequence of actions shall be followed:

- (a) Clear the machine or equipment of tools and materials.
- (b) Remove employees from the machine or equipment area.
- (c) Remove the lockout or tagout devices.
- (d) Energize and proceed with testing or positioning.
- (e) Deenergize all systems and reapply energy control measures in accordance with the requirements set forth in this instruction.

### **RESTORING MACHINES OR EQUIPMENT TO NORMAL PRODUCTION OPERATIONS**

- (1) After the servicing and/or maintenance is complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.
- (2) After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Operate the energy isolating devices to restore energy to the machine or equipment.

### **PROCEDURE INVOLVING MORE THAN ONE PERSON**

In the preceding steps, if more than one individual is required to lockout or tagout equipment, each shall place his/her own assigned lockout device or tagout device on the energy isolating device(s). When an energy isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own assigned lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his/her lock from the box or cabinet.

### **REMOVAL OF LOCKOUT OR TAGOUT DEVICES**

Lockout/tagout devices shall be removed from each energy isolating device by the employee who applied it, EXCEPT:

1. Lockout/tagout devices may be removed by (name or title of authorized management official) if the authorized employee who applied it is not available and:
  - (a) It is verified that the authorized employee who applied the device is not at the facility;
  - (b) All reasonable efforts were made to contact the authorized employee to inform him/her that his/her lockout or tagout device has been removed and;
  - (c) The authorized employee has this knowledge before he/she resumes work at the facility.

### **INFORMING OUTSIDE CONTRACTORS**

(Name or title of authorized management official) will inform all outside contractors of the elements of this program and obtain information regarding their lockout/tagout programs. This information shall be conveyed to our employees in an understandable manner. The work efforts covered by the procedure shall be fully coordinated and complied with.

### **SHIFT OR PERSONNEL CHANGES**

In the case of shift or personnel changes, a change over period will be established so that the authorized employees may exchange their assigned locks/tags. Authorized personnel assuming control of lockout of equipment will be fully briefed in the scope and stage of the work by those whom are being relieved.

## **PERIODIC EVALUATIONS**

Periodically (at least annually) the effectiveness of the entire program will be evaluated by an authorized employee(s) other than the one(s) utilizing the energy control procedure being inspected. Any deviations or inadequacies shall be documented and corrected. These annual evaluations will be conducted during the month of (select a month).

The date of the inspection/evaluation will be documented on the Annual Inspection Report (appendix C) and maintained as a part of this program until the next annual evaluation replaces it.

## **TRAINING**

Training shall be given to all authorized, affected and other personnel as required by 29 CFR 1910.147 (c)(7) and 29 CFR 1910.332. Appendix I provides Key Points for Lockout/Tagout Training Program and shall be used as a training outline along with the appropriate sections of the standard.

In addition, a copy of the illustrated overview of the standard is provided in appendix J, copies can be made and handed out at the training session or transparencies can be made and projected by an overhead projector.

(Name or title of authorized management official) will conduct training and prepare a record and certify that the employee training has been accomplished. The certification will be made on Appendix H (Training Record). (Name or title of authorized management official) will conduct retraining when there is:

- (a) A change in their job assignments,
- (b) A change in machines, equipment or processes that present a new hazard, or
- (c) Additional retraining shall also be conducted whenever the periodic inspection reveals, or whenever there is reason to believe, that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

## **ELECTRICAL WORK PRACTICES**

The adoption of the following elements for electrical work is designed for in plant electrical work. This adoption of the following requirements is not intended to be used for high voltage work (over 600 volts), or exposure to overhead power lines.

### **ELECTRICAL LOCKOUT/TAGOUT (29 CFR 1910.333(b))**

Electrical work requires a lock and a tag to be used together. However, a tag can be used by itself only if the electrical disconnecting source does not have lockout capabilities.

Locks can be placed without a tag only under the following conditions:

- (a) Only one circuit or piece of equipment is deenergized.
- (b) The lockout period does not extend beyond the work shift.
- (c) Employees exposed to the hazards associated with reenergizing the circuit or equipment are familiar with the procedure.

### **ELECTRICAL TEST VERIFICATION OF DEENERGIZED CIRCUITS (29 CFR 1910.333(b)(iv)(B))**

A qualified person shall use test equipment to test the circuit elements and electrical parts of equipment to which employees will be exposed and shall verify that the circuit elements and equipment parts are deenergized. The test shall also determine if any energized condition exists as a result of inadvertently induced voltage or unrelated voltage backfeed even though specific parts of the circuit have been deenergized and presumed to be safe. If the circuit to be tested is over 600 volts, nominal, the test equipment shall be checked for proper operation immediately before and immediately after this test.

### **WORK ON ENERGIZED CIRCUITS**

Approval must be obtained from (name or title of authorized management official) prior to any work on energized circuits. (Name or title of authorized management official) will verify that by deenergizing circuits that it will create additional or increased hazards or it is infeasible due to equipment design or operational limitations.

*NOTE:* Working on energized parts requires the wearing of appropriate personal protective equipment. (Name or title of authorized management official) will be responsible for specifying appropriate personnel equipment to be used, to ensure compliance with 29 CFR 1910.335. Personal protective equipment for electrical hazards shall meet, be used and maintained in accordance with ANSI J6.1 through J6.7. Qualified employees for electrical work shall be aware of and follow the approach distances for qualified employees for alternating current as specified in Table S-5 of 29 CFR 1910.333

### **ACCIDENTS CONCERNING LOCKOUT/TAGOUT**

(Name or title of authorized management official) will be responsible for fully investigating all lockout/tagout accidents, and reporting the cause of such accident to (Name or title of management official in-charge of facility). If the accident involved the control of hazardous energy with a single lockout source, a specific procedure will be written and included in appendix F before work is continued. If the accident involved a specific procedure for a piece of equipment, the lockout/tagout specific procedure will be evaluated and modified (if necessary) prior to authorizing work to continue.

**APPENDIX A**

**LIST OF AUTHORIZED LOCKOUT AND TAGOUT INDIVIDUALS**

WORK CENTER	LOCK NUMBER	NAME	MECHANICAL		ELECTRICAL	
			YES	NO	YES	NO

**NOTE: AUTHORIZED ELECTRICAL LOCKOUT/TAGOUT REQUIRES QUALIFIED WORKER IN ACCORDANCE WITH SUBPART "S" 29 CFR PART 1910.**

**APPENDIX B**

**LIST OF AFFECTED EMPLOYEES BY JOB TITLES**

<b>JOB TITLE</b>	<b>MACHINERY, EQUIPMENT OR PROCESS</b>

**LIST OF OTHER EMPLOYEES EXPOSED TO TAGOUT CONDITION  
APPLIES ONLY WHERE LOCKOUT CAN'T BE ACHIEVED**

<b>JOB TITLE</b>	<b>MACHINERY, EQUIPMENT OR PROCESS</b>



**APPENDIX C**  
**ANNUAL EVALUATION REPORT**

Date(s) of Evaluation \_\_\_\_\_.

Evaluation was made by \_\_\_\_\_  
(PRINT)

General policy has been reviewed: YES/NO  
(Circle one)

COMMENTS ON GENERAL POLICY:

THE FOLLOWING SPECIFIC PROCEDURES HAVE BEEN REVIEWED (LIST BELOW):

THE FOLLOWING SPECIFIC PROCEDURES WERE MODIFIED (LIST BELOW):

THE FOLLOWING SPECIFIC PROCEDURES WERE ADDED (LIST BELOW):

A REVIEW OF THE LOG OF OCCUPATIONAL INJURIES AND ILLNESSES (OSHA FORM 200 OR EQUIVALENT)  
AND THE ASSOCIATED ACCIDENT REPORTS AND INJURY/ILLNESS REPORTS (OSHA FORM 101 OR  
EQUIVALENT):

YES/NO (CIRCLE ONE)

THE FOLLOWING INJURIES RESULTED FROM LOCKOUT/TAGOUT (LIST BELOW):

IF INJURIES ARE LISTED ABOVE, INDICATE PROCEDURE NUMBER FOR APPLICABLE EQUIPMENT, PROCESS OR MACHINERY (LIST BELOW):

NOTE: These procedures shall be reviewed and modified as necessary:

COMMENTS:

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SIGNATURE/TITLE

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DATE

## APPENDIX D

### LOCKOUT/TAGOUT PROCEDURE/CHECKLIST ENERGY SOURCE DETERMINATION

**DATE:**\_\_\_\_\_ **CONDUCTED BY**\_\_\_\_\_

In order to determine all energy sources for each piece of equipment, all questions must be answered. If the question does not apply, write N/A in the blank. Circle "yes" or "no" or fill in the blank.

Location:\_\_\_\_\_ Work Center:\_\_\_\_\_

Line: \_\_\_\_\_ Equipment No. \_\_\_\_\_

Equipment Name: \_\_\_\_\_ Model:\_\_\_\_\_

Specific Procedure No. Assigned:\_\_\_\_\_ Serial No.:\_\_\_\_\_

List of authorized employees: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*TRAINING NOTE: A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.*

List of affected employees: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*TRAINING NOTE: An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.*

List of other employees: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*TRAINING NOTE: Where tagout systems are used, all other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked out, blocked out, or tagged out.*

1. Does this equipment have:

- a. Electric power (including battery)? YES/NO  
If yes, Motor Control Center (MCC) or power panel and breaker number\_\_\_\_\_

Does it have a lockout device? YES/NO

Battery location:\_\_\_\_\_

Battery disconnect location:\_\_\_\_\_

- b. Mechanical power? YES/NO

Mark each type of energy source that applies:

(1). Engine driven? YES/NO

If yes, switch or key location\_\_\_\_\_

Is lockout device installed? YES/NO

If no, method of preventing operation \_\_\_\_\_

(2). Spring loaded? YES/NO

If yes, is there a method of preventing spring activation? YES/NO

If no, how can spring tension be safely released or secured?

(3). Counter weight(s)? YES/NO

If yes, does it have a method of preventing movement? YES/NO

If yes, can it be locked? YES/NO

If no, how can it be secured?\_\_\_\_\_

(4). Flywheel? YES/NO

If yes, does it have a method of preventing movement? YES/NO

If yes, can it be locked? YES/NO

If no, how can it be secured? \_\_\_\_\_

c. Hydraulic power? YES/NO

If yes, location of main control/shut off valve \_\_\_\_\_

Can control/shut off valve be locked in "off" position? YES/NO

If no, location of closest manual shutoff valve\_\_\_\_\_

Does manual shutoff valve have lockout device? YES/NO

If no, what is needed to lock valve closed? \_\_\_\_\_

Is there a bleed or drain valve to reduce pressure to zero? YES/NO

If no, what will be required to bleed off pressure? \_\_\_\_\_  
\_\_\_\_\_

d. Pneumatic energy? YES/NO

If yes, location of main control/shut off valve \_\_\_\_\_  
\_\_\_\_\_

Can control/shut off valve be locked in "off" position? YES/NO

If no, location of closest manual shutoff valve \_\_\_\_\_  
\_\_\_\_\_

Does manual shutoff valve have lockout device? YES/NO

If no, what is needed to lock valve closed? \_\_\_\_\_  
\_\_\_\_\_

Is there a bleed or drain valve to reduce pressure to zero? YES/NO

If no, what will be required to bleed off pressure? \_\_\_\_\_  
\_\_\_\_\_

e. Chemical system? YES/NO

If yes, location of main control/shutoff valve \_\_\_\_\_  
\_\_\_\_\_

Can control/shutoff valve be locked in off/closed position? YES/NO

If no, location of closest manual shutoff valve \_\_\_\_\_  
\_\_\_\_\_

Does manual shutoff valve have lockout device? YES/NO

If no, what is needed to lock valve closed? \_\_\_\_\_  
\_\_\_\_\_

Is there a bleed or drain valve to safely reduce system pressure and drain system of chemicals? YES/NO

If no, how can system be drained and neutralized? \_\_\_\_\_  
\_\_\_\_\_

What personal protective clothing or equipment is needed for this equipment? \_\_\_\_\_  
\_\_\_\_\_

f. Thermal energy? YES/NO

If yes, location of main control/shutoff valve \_\_\_\_\_  
\_\_\_\_\_

If no, location of closest manual shutoff valve \_\_\_\_\_

If no, what is needed to lock valve closed?

If no, how can system pressure and temperature be reduced and drained?\_\_\_\_\_

What personal protective clothing or equipment is needed for this equipment? \_\_\_\_\_

Special precautions not noted above (i.e., fire hazards, chemical reactions, required cool down periods etc.):

[illegible]

Approved by:\_\_\_\_\_

## APPENDIX E

## LIST OF ENERGY CONTROL PROCEDURES

[illegible]

## APPENDIX F

EQUIPMENT, MACHINERY, OR PROCESS: \_\_\_\_\_

SPECIFIC PROCEDURE NO.: \_\_\_\_-\_\_\_\_(YEAR-NUMBER SEQUENTIALLY)

DATE APPROVED/IMPLEMENTED: \_\_\_\_\_

### ENERGY CONTROL MEASURES USED IN THIS SPECIFIC PROCEDURE:

LOCK	TAG	BLOCK	BLIND	OTHER (SPECIFY MEASURES USED)
YES/NO	YES/NO	YES/NO	YES/NO	

### SPECIFIC PROCEDURE

**NOTE:** Required for all equipment, machinery, and/or processes that fails to meet the exceptions noted in 29 CFR 1910.147(c)(4)(I).

1. The purpose of this specific procedure is to protect the employees of (Name of Company).

**NOTE:** Failure to comply with these procedures will result in disciplinary action and may result in employee discharge.

2. TYPE(S) AND MAGNITUDE(S) OF ENERGY AND HAZARDS:

3. NAME(S)/JOB TITLE(S) OF EMPLOYEES AUTHORIZED TO LOCKOUT/ BLOCKOUT/TAGOUT:

4. NAME(S)/JOB TITLE(S) OF AFFECTED EMPLOYEES AND HOW TO NOTIFY:

5. NAME(S)/JOB TITLE(S) OF OTHER EMPLOYEES (IF APPLICABLE):

6. TYPE(S) AND LOCATION OF ENERGY ISOLATING MEANS:

7. TYPE(S) OF STORED ENERGY - METHODS TO DISSIPATE OR RESTRAIN:



8. ADDITIONAL METHOD(S) SELECTED TO ENSURE THAT TAGS PROVIDE ADEQUATE LEVEL OF SAFETY (I.E., REMOVAL OF AN ISOLATING CIRCUIT ELEMENT, BLOCKING OF A CONTROLLING SWITCH, OPENING OF AN EXTRA DISCONNECTING DEVICE, THE REMOVAL OF A VALVE HANDLE TO REDUCE THE LIKELIHOOD OF INADVERTENT ENERGIZATION, BLOCKS TO SUPPORT ELEVATED MEMBERS, BLINDS IN PIPES, ETC.):

9. TYPE(S) OF EQUIPMENT CHECKED TO ENSURE DISCONNECTIONS:

10. NAME(S)/JOB TITLE(S) OF EMPLOYEES AUTHORIZED FOR GROUP LOCKOUT/TAGOUT:

11. SPECIAL PRECAUTIONS NOT NOTED ABOVE (I.E., FIRE HAZARDS, CHEMICAL REACTIONS, REQUIRED COOL DOWN PERIODS, ETC.):

## APPENDIX G

### METHODS OF TAG AND LOCK IDENTIFICATION

	<p>RECORD SERIAL NUMBER ON APPENDIX A TO IDENTIFY EMPLOYEE ASSIGNED. ALL LOCKS WILL BE OF (<u>LIST BRAND NAME OF LOCK</u>) BRAND.</p> <p>ONE KEY WILL BE ISSUED TO THE EMPLOYEE AND THE SECOND KEY WILL BE DESTROYED.</p>
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TAGS WILL ALWAYS BE SECURED BY A NYLON SELF LOCKING TIE, WHICH WILL REQUIRE CUTTING THE NYLON SELF LOCKING TIE TO REMOVE.

XXXXXXXXXXXXXXXXX X        O        X X ===== X X     DANGER     X X ===== X X                    X X     DO NOT     X X                    X X     _____ X X                    X X     _____ X X     NAME OF     X X   AUTHORIZED   X X   EMPLOYEE     X X                    X XXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXX X        O        X X ===== X X     DANGER     X X ===== X X DO NOT REMOVE X X     THIS TAG    X X                    X X     TO DO SO    X X     WITHOUT     X X   AUTHORITY     X X     WILL MEAN   X X   IMMEDIATE    X X   DISCHARGE    X X                    X X     SEE OTHER   X X         SIDE     X XXXXXXXXXXXXXXXXX	 INSERT ONE OF THE FOLLOWING:  X <---START, OPEN, CLOSE, X     ENERGIZE OR OPERATE X X <---PLACE NAME ON TAG X     PERMANENTLY X X X
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NOTE: OTHER METHODS OF IDENTIFYING LOCKS AND TAGS ARE ACCEPTABLE. THESE OTHER METHODS ARE SPECIFIED IN 29 CFR 1910.147(c)(5).

## APPENDIX H

### TRAINING RECORD/CERTIFICATION FOR ENERGY CONTROL TRAINING - LOCKOUT/BLOCKOUT/TAGOUT

This is to certify that the undersigned conducted training in accordance with 29 CFR 1910.147(c)(7) and the provisions of this lockout/tagout program. The following individuals received training on this company's energy control program.

**NOTE:** *This is not a certification for the training required for those exposed to electrical shock hazards as required by 29 CFR 1910.332.*

PRINT NAME	SIGNATURE OF EMPLOYEE	INDICATE TYPE OF TRAINING		
		AUTHORIZED	AFFECTED	OTHER

\_\_\_\_\_  
PRINT INSTRUCTOR'S NAME

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
INSTRUCTOR'S SIGNATURE

## **APPENDIX I**

### **KEY POINTS FOR LOCKOUT/TAGOUT TRAINING PROGRAM**

#### **GENERAL RULES**

Procedures developed, documented and utilized for control of potentially hazardous energy.

Employer has provided locks, tags, chains, wedges, key blocks, adapter pins, self locking fasteners, or other hardware for isolating, securing or blocking machines or equipment.

Lockout/Tagout devices singularly identified.

Lockout/Tagout devices are used only for controlling energy.

Lockout/Tagout devices are not used for other purposes.

Durable lockout/tagout devices must be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.

Standardized lockout/tagout devices must be standardized within each facility in at least color, shape or size.

For tagout devices, also standardized print and format.

Must be legible and understandable. (Bi-lingual?)

Identifiable lockout/tagout devices must indicate the identity of the employee applying the devices.

When major modifications are made to machinery electrical systems or when new machinery is installed, the energy source must be designed to accept a lockout device.

Inspection conducted at least annually.

Performed by authorized employee other than those utilizing energy control procedure under inspection.

Designed to correct any deviations or inadequacies observed.

Include review of each authorized employee's responsibilities under the procedure(s). If tagout is used, then include review of limitations of tags.

## **APPENDIX I – Continued**

Substantial: Tagout devices and means of attachment.

Sufficient to prevent inadvertent or accidental removal.

Attachment means must be non-reusable type; attached by hand; self locking; non-releasable with minimum unlocking strength no less than 50 pounds; at least equivalent in design and characteristics to one-piece, all environment tolerant nylon cable tie; and if used with electrical must be non-conductive.

Warnings:

Warn against hazardous conditions if machine or equipment will be or is energized.

Legend such as "Do Not Start", "Do Not Close", "Do Not Energize", "Do Not Operate".

Training: Limits of tags.

Warning devices, not physical restraint.

Do not remove without authorization; never bypass, ignore, or otherwise defeat tag.

Must be legible and understandable.

Tags and means of attachment must be made of materials that will withstand workplace environmental conditions.

May evoke false security; understand meaning.

Securely attached to energy isolating devices.

Application:

Clearly indicate that the operation or movement of energy isolating devices from "safe" or "off" position is prohibited.

Attach at the same point that lock would have been attached (if lockout capability exists).

If cannot affix to energy isolating device, then affix as close as safely possible and in an obvious position.